



Product Name: Pyrenone® 100
Product Code: 15351
MSDS Number : C1917
Version Date: June 14 2000

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Material Safety Data Sheet

Print date -- August 9th, 2000 8:51 a.m. (E) PS PSA PSFHV -- 1.1 (1/9)

1. CHEMICAL PRODUCT and COMPANY IDENTIFICATION

Product Name: Pyrenone® 100
Product Code: 15351
MSDS Number : C1917
Chemical Family: Mixture
Chemical Formula: Mixture
EPA Registry Number: 432-1072

AVENTIS ENVIRONMENTAL SCIENCE USA LP
95 CHESTNUT RIDGE ROAD
MONTVALE, NJ 07645
UNITED STATES

Pyrenone is a registered trademark of Aventis.

2. COMPOSITION / INFORMATION on INGREDIENTS

Component	Cas number	%
Pyrethrin	8003-34-7	1%
Piperonyl butoxide	51-03-6	5%
Aliphatic Petroleum	64742-47-8	94%
Distillates		

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Thin, light yellow liquid that is:

- Harmful if swallowed.
- Toxic to fish.

POTENTIAL HEALTH EFFECTS

ROUTES OF EXPOSURE:

Ingestion and inhalation.

☎ For Product Use Information: (800) 331-2867 24 Hours/Day
Medic./Trans. Emergency:
(DART) (800) 334-7577 24 Hours/Day
(CHEMTREC) (800) 424-9300 24 Hours/Day

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----- 3. HAZARDS IDENTIFICATION (Continued) -----

SIGNS AND SYMPTOMS OF EXPOSURE:

May cause gastrointestinal effects such as nausea, vomiting and diarrhea. Ingestion of large quantities can result in nervous system effects such as dizziness, loss of coordination, tremors and loss of consciousness. Symptoms usually regress with no long lasting effects.

IMMEDIATE EFFECTS

SKIN:

May cause mild irritation.

INHALATION:

May be harmful if inhaled.

INGESTION:

Harmful if swallowed.

DELAYED/LONG TERM EFFECTS

CARCINOGENIC:

See Section 11 for carcinogenic/oncogenic information on piperonyl butoxide.

----- 4. FIRST AID MEASURES -----

After contact with skin:

Remove contaminated clothing and wash affected areas of skin with soap and water.

After contact with eyes:

Flush with plenty of water. Contact a physician if irritation persists.

After inhalation:

Remove affected person to fresh air. Apply artificial respiration if indicated.

After ingestion:

Call a physician or Poison Control Center immediately. Do not induce vomiting unless directed by a physician. Vomiting may cause aspiration hazard. This product contains a petroleum solvent.

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----- 4. FIRST AID MEASURES (Continued) -----

Hints for the physician:

This product contains a pyrethroid. If a small amount is ingested (or if treatment is delayed) oral administration of large amounts of activated charcoal and a cathartic is probably sufficient therapy.

Do not administer milk, cream or other substances containing vegetable or animal fats, which enhance the absorption of lipophilic substances.

----- 5. FIRE FIGHTING MEASURES -----

FLAMMABLE PROPERTIES

Flash point: 168°F 75°C TCC
Lower explosive limit (%): 0.6%
Upper explosive limit (%): 7.0%

Advice on protection against fire and explosion:

FIRE FIGHTING INSTRUCTIONS: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear. Do not use direct stream of water. Material may float and reignite.

Suitable extinguishing media:

Carbon dioxide, dry chemical, foam or water.

----- 6. ACCIDENTAL RELEASE MEASURES -----

Soak up with an absorbent material such as sand, sawdust, fuller's earth, etc. Dispose with chemical waste.

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7. HANDLING and STORAGE

Handling:

- Do not breathe spray mist.
- Remove pets, birds and cover fish aquaria before spraying.
- Do not apply as a space spray while food processing is underway.
- Foods should be removed or covered before treatments.
- When using in animal quarters, do not apply directly to food, water or food supplements.

Storage:

Store upright at room temperature. Avoid exposure to extreme temperatures.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Hygiene measures:

Wash exposed skin surfaces with soap and water after handling and before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse. Wash teats of dairy animals before milking.

Food processing surfaces and equipment must be covered during treatment or cleaned with a suitable detergent and rinsed with potable water before reuse.

Personal protective equipment

Body protection:

Rubber or impervious gloves.

Eye protection:

Safety glasses or goggles.

Respiratory protection:

Wear mask or respirator of a type recommended by the U.S. Bureau of Mines to give adequate protection against this material.

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Medic./Toxic. Emergency:		
(DART)	(800)334-7577	24 Hours/Day
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----- 8. EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued) -----

EXPOSURE GUIDELINES:

Pyrethrin (8003-34-7)

OSHA PEL	ACGIH TLV	HCC WEL
5 mg/m ³ (PEL)	5 mg/m ³ (TWA)	None

----- 9. PHYSICAL and CHEMICAL PROPERTIES -----

APPEARANCE: Thin, clear, light yellow liquid

ODOR: Very mild

BASIC PHYSICAL PROPERTIES

PHYSICAL STATE: Liquid

VAPOR PRESSURE: < 2 mm Hg @ 25°C

VAPOR DENSITY (AIR=1): > 5

SPECIFIC GRAVITY: 0.789

SOLUBILITY (H₂O): Insoluble

PERCENT VOLATILES: 94%

EVAPORATION RATE: < 0.1 (N-Butyl Acetate = 1)

----- 10. STABILITY and REACTIVITY -----

CHEMICAL STABILITY:

Stable

INCOMPATIBILITY:

Strong oxidizing agents.

HAZARDOUS POLYMERIZATION:

Will not occur

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11. TOXICOLOGICAL INFORMATION

ACUTE STUDIES

Acute toxicity data based on Turbocide Gold with Pyrenone, EPA Reg. No. 432-1186, containing 4.03% Pyrethrins and 32.26% Piperonyl Butoxide.

EYE EFFECTS

Non-irritating

SKIN EFFECTS

Irritation: Mildly irritating
Absorption: LD50 > 3,000 mg/kg
Sensitization: Not a sensitizer

ACUTE ORAL EFFECTS

LD50 > 3,000 mg/kg

ACUTE INHALATION EFFECTS

4 Hour LC50 > 4.93 mg/l
1 hour equivalent LC50 > 19.72 mg/l (for DOT purposes)

CHRONIC (CANCER INFORMATION)

In a recent study, marginally higher incidences of benign thyroid, parathyroid, ovary, and liver tumors were observed in rats and in lungs of mice following lifetime high doses exposures to pyrethrum.

Marginally higher incidences of benign liver tumors in mice were observed in mice following lifetime high dose exposures to piperonyl butoxide.

The significance of these observations is questionable and under review. The doses at which tumors were observed for both pyrethrum and piperonyl butoxide greatly exceeded potential human exposure from labeled uses.

CARCINOGENICITY: NTP: No IARC: No OSHA: No

TERATOGENICITY (BIRTH DEFECTS)

There were no birth defects or adverse effects on reproductive parameters in tests with rats or rabbits for either pyrethrum or piperonyl butoxide. They are not considered to be teratogenic.

MUTAGENITICY (GENETIC EFFECTS)

Pyrethrum was not found to be genotoxic and did not damage

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----- 11. TOXICOLOGICAL INFORMATION (Continued) -----

DNA in any study conducted (Ames mutagenicity assay, chromosome aberration in Chinese hamster ovaries (CHO) cells, and in the unscheduled DNA synthesis (UDS) assay in cultured human liver cells.

PBO was not genotoxic in several tests including the Ames mutagenicity assay, chromosome aberration in Chinese hamster ovary (CHO) cells, CHO/HGPRT assay with S9 activation, and in the unscheduled DNA synthesis (UDS) assay in cultured human liver cells.

----- 12. ECOLOGICAL INFORMATION -----

OTHER ENVIRONMENTAL INFORMATION

This product is toxic to fish. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below mean high water mark. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Do not cotaminate water by cleaning of equipment or disposal of equipment wash waters. Shrimp and crab may be killed at application rates recommended on label. Do not apply where these are important resources.

----- 13. DISPOSAL CONSIDERATIONS -----

Pesticide Disposal: Pesticide, spray mixture or rinse water that cannot be used according to label instructions must be disposed of at or by an approved waste disposal facility.

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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----- 14. TRANSPORT INFORMATION -----

PROPER SHIPPING NAME: Environmentally hazardous substance,
liquid, n.o.s. (Pyrethrins)

HAZARD CLASS: 9, PG III
DOT IDENTIFICATION NUMBER: UN3082
DOT SHIPPING LABEL: Class 9

ADDITIONAL SHIPPING PAPER DESCRIPTION
RQ (Pyrethrins)

This product is not regulated by DOT if total product
shipped is less than 15 gallons.

----- 15. REGULATORY INFORMATION -----

STATE REGULATIONS

The following chemicals associated with the product are
subject to the right-to-know regulations in these states:
Pyrethrin (8003-34-7): CT, FL, IL, MA, NJ, NY, PA, RI
Piperonyl butoxide (51-03-6): NJ

U.S. FEDERAL REGULATIONS

SARA TITLE III NOTIFICATION AND INFORMATION:
Reportable Quantity (Pounds): 1

TSCA inventory status
These components are not listed:
Pyrethrin 1% (8003-34-7)

SARA 313 :
Piperonyl butoxide 5% (51-03-6)

ENVIRONMENTAL:

CERCLA HAZARDOUS SUBSTANCE :
Pyrethrin 1% (8003-34-7)
SARA EHS 304 REPORTABLE QUANTITY :
Pyrethrin 1% (8003-34-7)

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----- 15. REGULATORY INFORMATION (Continued) -----

INTERNATIONAL REGULATIONS

Die folgende(n) Chemikalie(n), die mit dem Produkt verbunden sind, sind auch auf folgenden internationalen Listen aufgeföhrt:

Pyrethrin (8003-34-7): CANADIAN DSL, EINECS

Piperonyl butoxide (51-03-6): CANADIAN DSL, EINECS

Aliphatic Petroleum Distillates (64742-47-8): CANADIAN DSL,
EINECS

----- 16. OTHER INFORMATION -----

HAZARD RATINGS

	HEALTH	FLAMM	REACT	OTHER
HMIS	1	2	0	F

REVISED SECTIONS:

MSDS REVISION INDICATOR: New Format, Company Name and EPA Number.

PREPARED BY: Regulatory Department

PHONE: 800-438-5837

SUPERCEDES MSDS DATED: 02/06/97

DISCLAIMER:

This information is provided in good faith but without expressed or implied warranty. Buyer assumes all responsibility for safety and use not in accordance with label directions.

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